Board of Science Advisors (BSA)
caBIG® Oversight Ad hoc Subcommittee Teleconference Meeting

National Cancer Institute, 8th Floor
August 25, 2011
11:00 a.m. – 12:55 p.m.

SUMMARY

Participants:
Dr. Daniel Masys, Chair
Dr. Brian D. Athey
Dr. Andrea Califano
Dr. Robert Comis
Mr. Paul Fearn
Dr. Joe Gray
Dr. Rebecca Kush
Dr. Lincoln Stein
Dr. Jean Wang

Other Participants:
Dr. Jeff Kan (American Society of Clinical Oncology)
Mr. Bron Kisler (CDISC)
Ms. Mary Ann Slack (U.S. Food and Drug Administration, Office of Business Process Support)

NCI Staff Participants:
Mr. John Czajkowski
Dr. Paulette Gray
Dr. Ken Buetow
Ms. Claire Harris
Ms. Andrea Collins

Review of Agenda—Dr. Daniel Masys

Dr. Daniel Masys reviewed the agenda for the teleconference, which included summarizing the highlights of the July 2011 subcommittee meeting and commenting on the final draft of the meeting summary. He also hoped that during this teleconference the subcommittee would refine its recommended functional criteria for evaluating caBIG® projects, clarify the definition of "meaningful use" in regard to caBIG® tools, and suggest topics for white papers that would help the NCI focus future requests for applications (RFAs) under caBIG®.

Summary of July 2011 caBIG® Subcommittee Meeting—Dr. Daniel Masys

Dr. Masys summarized the highlights of the July 2011 caBIG® subcommittee meeting. Dr. Harold Varmus emphasized that caBIG® needs to strengthen its link to community doctors in his opening remarks. In addition, Dr. Lincoln Stein and Dr. Andrea Califano prepared an excellent presentation on the findings of the caBIG® working group.

Draft of July 2011 Summary Report

The subcommittee discussed whether or not the seven functional criteria for judging caBIG® projects should be called recommendations. Dr. Brian Athey pointed out that they were written in the form of questions and perhaps should be reformulated as statements. Dr. Rebecca Kush agreed that the label "recommendation" was misleading unless they were rephrased as statements. Dr. Masys agreed to revise it. Dr. Masys will produce a set of criteria from the July 2011 meeting by which caBIG® projects can be

evaluated and send it to the subcommittee for their review. He also will make the changes to the report that the subcommittee recommends and send it to Dr. Paulette Gray, who will distribute the final version to the subcommittee. He thanked NCI staff for their help in preparing the summary.

Dr. Masys stated that he thought that the action items in the summary were uneven. After subcommittee discussion it was agreed that the action items from this teleconference will replace the previous list.

Planning for November 2011 BSA Meeting

Dr. Paulette Gray suggested that at the November 2011 BSA Meeting Dr. Masys would give an overview of the progress of the subcommittee toward meeting its charge and recapitulate the key points from the working group report. She also thought it would be useful for the subcommittee to meet with members of the BSA on the evening before the meeting (November 6, 2011). Dr. Masys asked Dr. Paulette Gray whether NCI staff could arrange the meeting and she agreed.

Evaluating caBIG® Projects

The subcommittee discussed the most productive issues to focus on during this teleconference. Dr. Califano stated that caBIG® needed to refocus on the needs of the community. Dr. Masys suggested that this could be done best by separating projects into different topic areas –bioinformatics and basic cancer research, clinical and translational informatics, and informatics infrastructure--and focusing on identifying emerging science and the needs of researchers. This raised the topic of how the NCI makes its funding decisions, which subcommittee members thought was important to understand for the subcommittee to provide recommendations to the NCI effectively. At the subcommittee's request Dr. Ken Buetow described the process by which the NCI gathers external input from the scientific community and internal input from programs within the NCI to set its funding priorities. He stated that the NCI can benefit from the subcommittee's review of proposed projects and project areas to help with establishing caBIG program priorities. He also foresaw a role for the subcommittee in ensuring that scientifically important projects did not lose funding during changes in the caBIG® funding process. Dr. Califano suggested that the NCI might have to modify its procedures to broaden the source of funding-priority feedback to include the clinical community. Otherwise, he predicted that caBIG® will continue to be driven disproportionately by the technical community. Dr. Joe Gray asked how the subcommittee's recommendations will be communicated to the NCI. Dr. Califano responded that the caBIG® subcommittee will make its recommendations directly to Dr. Buetow as did the original subcommittee.

Dr. Masys proposed that the subcommittee evaluate caBIG® projects using a standard template. The template would be in the form of a tracking table (as a Microsoft® Word table rather than an Excel spreadsheet to enable more extensive text content than Excel supports). It would identify the conceptual background for a project, the users it is designed to serve, functionality envisioned, key project milestones, linkages to other projects that are dependent upon it, and evaluation metrics used to gauge its success. Using this table would be a key step toward making caBIG® user-needs driven. Dr. Buetow welcomed this approach, noting that the NCI's recent solicitation of input on funding needs from the *in silico* centers has been an attempt to include the scientific community in the funding process. Dr. Athey agreed with the idea of a template and added that it also would be helpful to track upcoming funding deadlines for each project to make sure funding does not run out before a project can be evaluated.

The subcommittee addressed how caBIG® projects should be categorized for evaluation. Dr. Jean Wang recommended discriminating between clinical and research bioinformatics projects. Dr. Kush was concerned that some projects in the category of infrastructure that were very well received might be overlooked because they did not fit under a particular research topic (e.g., Enterprise Vocabulary

Services, caTissue). Dr. Masys suggested dividing the subcommittee into three working groups organized by topic. The subcommittee agreed that the groups would cover translational/clinical projects, research, and informatics infrastructure. A general expectation would be that each subcommittee member participates in two groups. Dr. Masys will begin work on a document outlining the scope of activities of the subcommittee and each of its working groups (ie., definition of projects and activities that fall within that working group's purview), operating procedures, and criteria used for judging the merit and effectiveness of new and existing projects. Dr. Masys will outline "articles of collaboration" for each of the working groups. The "articles of collaboration" (a term used for an NIH Network) will be roughly one page and describe the scope, operating procedures, and deliverables of each of the three working groups. Each group will evaluate the caBIG projects that fall under its scope. The materials about the projects will be provided to them by Dr. Buetow. Each member is expected to volunteer for two of the three groups.

The subcommittee recognized that establishing a common vocabulary was an important priority for caBIG®. The vocabulary used by commercial software developers is determined by user needs, making it largely market driven. Dr. Wang thought it was important to include commercial software vendors in the subcommittee's discussion of vocabulary. Dr. Masys asked Dr. Paulette Gray and her staff to determine the best way for commercial software developers to provide input, so that a consensus of commercial interest needs is obtained rather than a specific advantage for a single company or group of companies.

Dr. Joe Gray expressed concern that the subcommittee might become too involved in the nuts and bolts of caBIG® funding and not address its charge from the NCI. Dr. Buetow responded that helping make caBIG® funding decisions was very important because of significant current and future budget cuts. The main funding criterion should be to optimize how the NCI's investment in caBIG® can best improve cancer science and care.

Dr. Masys summarized the procedures by which the subcommittee will act. It will use a high-level tracking table of current and potential caBIG® projects. The template for this table will be an adaptation of the format already provided by Dr. Buetow. The subcommittee also asked if caBIG program staff could maintain a "project at a glance" summary document for each new and ongoing project that corresponds to the high level tracking summary table and adds additional detail including the background, milestones, deliverables, due dates, and any budget information that is appropriate and necessary for effective subcommittee review. Dr. Masys will provide a sample Project Concept Sheet used by other NIH consortia for initial project review and subsequent project tracking. Drs. Wang and Joe Gray stressed the need for the NCI to present work groups with information on caBIG® projects in digested form. Dr. Buetow responded that he can provide it as a portfolio of summaries.

Dr. Buetow noted that this process is a departure from the subcommittee's original mission, which was to rule whether or not a project should be included in caBIG®, not recommend changes. He thought that the timetable and deliverables of the subcommittee might have to expand to fit this new role, but expressed support for those changes. He noted that the timelines were established before the subcommittee started to operate. Dr. Masys concurred, adding that he envisioned the charge of the subcommittee as extending beyond pruning out weak programs to the broader goal of making caBIG®'s contributions widely admired and respected throughout the community of cancer research and care.

The subcommittee considered how to determine the success of a project. Dr. Robert Comis noted that on his list of 53 caBIG® projects, 25 were not active and 11 were in development. There was no indication of how widely used each project was and what was their potential for future use. Discussion about defining a project's or tool's "usefulness" ensued. Dr. Masys suggested that the subcommittee should agree on a set

of metrics of "meaningful use." Dr. Buetow pointed out that even though caBIG® was no longer funding a project, it did not indicate that it was not useful. caBIG® was never intended to be a permanent funding source. Some of the archived projects might still be continuing with non-NCI funding sources. Dr. Masys also pointed out that some tools might have been useful in their time, but could have been tied to laboratory methods that have become outdated. caBIG® also has supported, and in the view of the subcommittee should continue to support some high-risk/high-reward projects, even though some might fail. Dr. Athey recommended that the subcommittee also consider whether archived projects might be worthy of reviving.

Dr. Masys summarized the action items established at this teleconference (see below). These new action items for the subcommittee will supersede the previous list from the July 2011 meeting. Dr. Paulette Gray will send a copy of the action items to the subcommittee members. The next call will be on September 26, 2011, at 3:00 p.m.

Action Items

- Dr. Masys will refine the set of functional criteria (SOPs) from the July 2011 Chicago meeting by which caBIG® projects can be evaluated and send it to the subcommittee for their review.
- Dr. Masys will finalize the summary of the July 2011 Chicago subcommittee meeting and send it to Dr. Paulette Gray for distribution to the members of the subcommittee.
- CMO staff will schedule a meeting on November 7, 2011, between the BSA and the caBIG® subcommittee.
- Mr. Czajkowski will form three working groups (translational/clinical, research, and informatics infrastructure).
- Dr. Masys will outline "articles of collaboration" for each of the working groups that will cover their scope, operating procedures, and deliverables.
- Dr. Gray will determine how the caBIG® subcommittee can receive input from commercial software vendors.
- Dr. Buetow will prepare a template for a high-level tracking table for current and potential caBIG® projects.
- Dr. Buetow will provide the subcommittee with a concept sheet, i.e., "At a Glance Summary", for each project that includes importance, deliverables, and milestones.
- Dr. Masys will design a template for a detailed project-tracking table.
- Dr. Paulette Gray will send a copy of the new subcommittee action items to the subcommittee members.

Adjournment – Dr. Daniel R. Masys

There being no further business, the meeting was adjourned at 12:55 p.m. on Monday, 25 August 2011.

30 OCT 2011
Date

Daniel R. Masys, M.D.,
Chair, caBIG® Oversight Ad hoc Subcommittee

10/6/11
Date

John Czajkowski, M.P.A.
Co-Executive Secretary, caBIG® Oversight Ad hoc Subcommittee

10/4/11
Date

Paulette S. Gray, Ph.D.
Co-Executive Secretary, caBIG® Oversight Ad hoc Subcommittee